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CALIFORNIA PUBLIC UTILITIES COMMISSION
TRANSPORTATION DIVISION

REPORT ON
SERVICE AND OPERATIONS OF
BLUE & WHITE BUS COMPANY OF WATTS

APPLICATION NO. 52311
(Amended)

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Lloyd C. Young
Associate Transportation Engineer
April 23, 1971

BLUE & WHITE BUS COMPANY OF WATTS

Application No. 52311
(Amended)

Purpose

This study has been made by the Commission staff to determine the use of the present bus lines of Blue & White Bus Company of Watts and whether or not adjustments in service or routes appear necessary or feasible.

Conclusions

(1) Blue & White should give consideration to changing peak-hour service on Lines 3 and 4 from 15 minutes to 20 minutes, with improved on-time performance accomplished at the same time.

(2) Authority of this Commission should be obtained by Blue & White to cover its recent extension of Line 6 to serve the Imperial Courts Housing Project.

(3) Blue & White should consider requesting authority to discontinue Line 8 service on Wilmington Avenue south of Compton Boulevard and to reroute such service along Compton Boulevard to Willowbrook Avenue in the City of Compton.

(4) School service area authority should be obtained from this Commission instead of existing specific school routes.

Description of Service Check

Blue & White operates in the south central Los Angeles area over routes shown on the map attached, marked Appendix A. With the exception of Line No. 8, which was extended December 18, 1970 in the Compton area, and Line 6, extended to Imperial Courts, these routes have been followed for many years by predecessor companies.

The route lengths, basic frequency of service, and number of buses required are shown on Appendix B attached.

Riding checks were made by observation of buses to determine the peak load points on each regular route except Line 6. A sample check is attached, marked Exhibit C, for Line 5 - Huntington Park. No check was made on Line 6 because only about 175 passengers per day are carried on that line, on which hourly service is provided.

After determination of the peak load points on Lines 3, 4, 5 and 8, checks were made on Wednesday, February 24, and Monday, March 1 and 15, 1971, at such points between 3 p.m. and 6 p.m. The results of these checks are shown on Appendices D and E, attached.

On Wednesday, February 24, the load factors for the entire period checked ranged from 48 to 55 percent, that is, the passengers on board buses, passing peak load points, amounted to 48 to 55 percent of the total seats provided.

It was understood that travel on these lines increases about one-third on the 1st and 15th of each month. Therefore, similar checks were made on March 1 and 15, on which dates the load factors increased and ranged from 64 to 84 percent.

Weather was clear on all check dates. It is also believed that by February 24 riding had returned to normal after the earthquake on February 9 and the fare increase effective February 8.

Revenues and Expenses by Lines

An estimate of revenues and expenses for the period March 1-28, 1971 has been prepared for Lines 3-4, Line 5, Line 6, Line 8 and the Special School service shown individually, as shown in Appendix F attached.

In preparing this estimate, bus miles operated and drivers' pay times were developed from the company's work run assignments for drivers for each line. Other expenses are on a full cost basis, except for income tax, as developed in the staff's study of projected operations results.

Revenues were obtained directly from the company's records where possible. Allocations were made when necessary in connection with cash collections in fare boxes on certain runs involving school service, as well as in connection with miscellaneous revenues derived from school tickets honored, tokens, monthly passes, diversion payments from the Southern California Rapid Transit District, and advertising.

It should be noted on Appendix F that under the present 25¢ one way adult fare, revenues were adequate to meet the full cost of operation on Lines 3-4, 5 and Special School services.

The operating statistics shown in Appendix G are basic to gauging the efficiency of each line's operations. These measures of efficiency

should provide Blue & White a valuable management tool when considering extensions, establishing new lines or changing service on existing lines. For example, when Line 8 was extended in December 1970 about 2.3 miles to the south, it required the use of one added bus, the operation of 40,800 additional bus miles per year, and two added drivers on the line, at an out-of-pocket cost estimated at \$10,000 per driver, including all payroll taxes and fringe benefits, plus \$2,600 for running costs, making a total of \$22,600 per year.

Plainly, the line was not able to bear the increased cost and during the first four weeks of March 1971 lost \$2,342 on a full cost basis.

When extensions of service are made the increased costs may be developed on an out-of-pocket basis, that is, so much for each additional driver with bare running cost of 7¢ per bus mile, provided no added buses are required.

School Services

Blue & White operates extensive service on special school routes, and usually such buses and drivers are also assigned to work various regular lines in the morning and evening peak periods. On Friday, March 5, 1971, the special school services were used by an estimated 630 riders or 63 per bus (but not per trip, since these buses normally make more than one trip per day in school service).

Blue & White's special school routes for the transportation of school children only are specified by this Commission in Decision No. 76167 to serve the Washington, Harte and Clay schools in Los Angeles. The current drivers' work runs show special school service off regular routes to the following added schools:

- (1) St. Francis Cabrini on Imperial Highway at Normandie in City of Los Angeles.
- (2) Huntington Park High School in Huntington Park.
- (3) St. Matthias School in Huntington Park.

Of course, there are several other schools which are served by Blue & White buses operating along parts of regular routes.

The existing special school routes followed by Blue & White are complicated and circuitous and not covered completely by authority from this

Commission. In order to avoid detailed route descriptions which no doubt are changed from time to time due to requirements of students, it is suggested that Blue & White apply to this Commission for an area certificate for special school operations with boundaries approximately as follows:

Boundaries

North: Slauson Avenue, City of Los Angeles
South: Compton Boulevard, City of Compton
East: Miles Boulevard, City of Huntington Park
West: Crenshaw Boulevard, City of Inglewood

These boundaries are roughly the same as the extreme limits of Blue & White's regular lines except on the west where Crenshaw Boulevard, Inglewood, is about 3 miles west of Broadway and Manchester in the City of Los Angeles.

Lines 3 and 4

The most frequent service provided by Blue & White is operated on Lines 3 and 4, with a 15-minute frequency on each line leaving the common terminal of Manchester Avenue and Broadway, in the City of Los Angeles, during the evening peak. Buses and drivers on these two lines are intermingled to such an extent that they must be considered together with respect to service operated, revenues and expenses.

Based on data presented in Exhibit D, it does not appear necessary for Blue & White to continue operating the frequency of service it now provides on Lines 3 and 4 during peak travel periods. Blue & White should consider changing the frequency during peak periods from the present 15 minutes to 20 minutes, which will provide adequate service.

A change of service on Lines 3 and 4 should be made only after careful consideration by the bus company to determine whether or not through runs should be eliminated or school runs reworked so that the additional special school service will be tacked onto other regular runs. The school runs are expected to be discontinued in the summer, along with related short trips on regular lines, and this situation should be kept in mind when considering any change in service.

Appendix D shows actual times passing Manchester and Avalon Boulevard, Los Angeles, for southbound buses on Lines 3 and 4 for certain dates. As evidence of unsatisfactory on-time performance, it should be noted that on Wednesday, February 24, four buses passed that point southbound between 3 and 4 p.m., but on Monday, March 15, there were only two buses southbound on Line 3 during the same hour. Irregular service like this is not satisfactory. Better supervision and/or improved scheduling is needed to improve on-time performance on these lines, especially on Line 3.

It is estimated that establishing 20 minute peak-hour service on each of Lines 3 and 4 will result in a net saving of \$10,000 per year.

Line 5

Line 5 - Huntington Park has recently experienced a considerable increase in passenger traffic. The present service is adequate to meet the increased demand, and no change in service is recommended.

Line 6

In May 1970, the company reduced service on its Line 6 to one round trip per day. On November 5, 1970, hearings were held in Watts to determine whether or not Blue & White should be authorized to discontinue Line 6 entirely. The application for such authority was withdrawn later and hourly service reestablished on Line 6 on November 9. Blue & White has since extended Line 6 in the southeast part of Watts to service the Imperial Courts Housing Project. No authority was obtained from this Commission for such extension.

For the 4 weeks of March 1-28, 1971, cash revenues in the fare box on the Line 6 bus amounted to \$854, as shown in Appendix F, which means that the line carried an average of 170 passengers a day, plus an average of 3 school tickets and possibly pass or token riders.

With such a small number of passengers transported, the question arises as to whether or not Line 6 service should be continued by Blue & White, and a study was made with costs estimated on the basis of how much Blue & White would save should Line 6 not be operated. This is far different from a full cost or out-of-pocket basis of allocation.

The results of this study are shown in Appendix H, attached, which shows an estimated loss to Blue & White of \$140 per year should Line 6 be discontinued. In other words, the savable costs for Line 6 are \$140 less than the estimated revenue for that line.

Line 8

On December 18, 1970, under authority of Decision No. 77328, Line 8 was extended 2.3 miles southerly from its terminus at Stockwell and Wilmington Avenues, Compton, to Greenleaf Drive and Wilmington Avenue in Compton.

When a riding check was made on Line 8 it was noticed that patronage south of Compton Boulevard was meager. A check was taken for one week, March 1-7, 1971, which indicated that 47 passengers rode to points south of Compton Boulevard on southbound coaches and 68 passengers boarded northbound coaches on Line 8 at points south of Compton Boulevard, or a total of 115 passengers for the entire week. At 25¢ per passenger, this amounts to an annual revenue of about \$1,500.

One of the reasons set forth by Blue & White for making the extension of Line 8 was to provide service for Compton residents to and from the new Martin Luther King, Jr. Hospital being constructed by Los Angeles County on 120th Street between Wilmington Avenue and Compton Avenue. The hospital is still under construction and is expected to be ready for occupancy in October 1971.

It is no doubt desirable to provide service for Compton residents desiring to reach the Martin Luther King, Jr. Hospital by the extension of Line 8, at least to Compton Boulevard. The problem is that an extension of Line 8 south of Stockwell Avenue and Wilmington Avenue even to Compton Boulevard upsets the efficient operation of the line because more bus drivers and equipment are required to maintain the present schedule.

Rather than have excessive layover time at either end of the line, it would be better to reroute the line along Compton Boulevard east to Willowbrook Avenue, affording a direct service from central Compton to the hospital, as well as numerous connections with the Southern California Rapid Transit District lines, such as with Line 100 at 103rd Street and

Compton Avenue in Watts, and with Line 3 at Slauson and Central Avenue, which is the southern limit of the Inner Zone fare of the Rapid Transit District.

If Line 8 cannot be rerouted, consideration should be given to returning to the former operation with Stockwell Avenue as the southern terminus, to overcome the loss now incurred on this line.

The rerouting of Line 8 to Compton Boulevard and Willowbrook Avenue will not result in any appreciable reduction in operating expenses. It is believed that there will be some increase in revenue through serving central Compton.

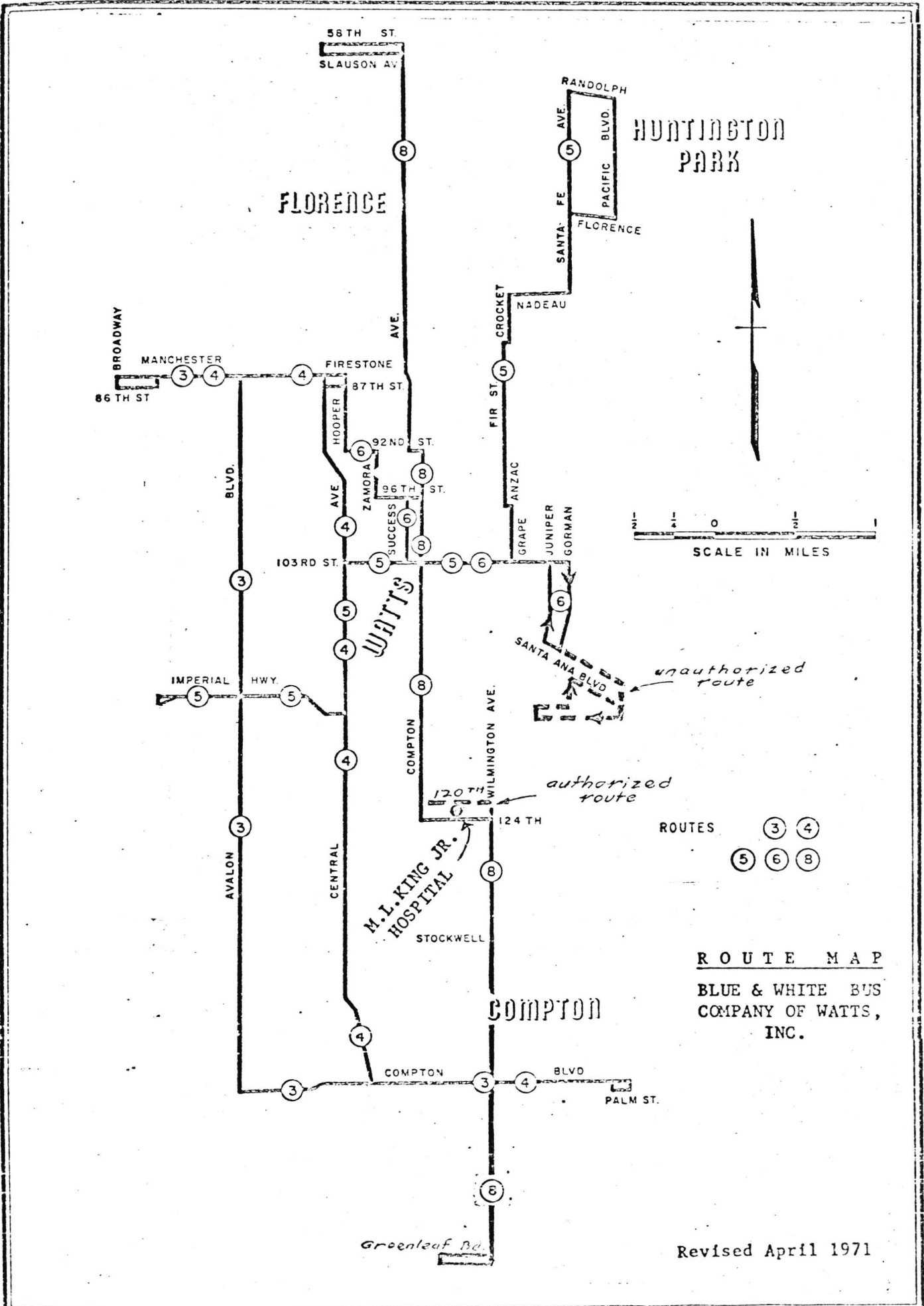
Estimated Adjusted Results of Operations

Appendix "I" shows estimated results of operations of Blue & White for 12 months ending March 31, 1972, taking into consideration the possible adjustment in peak-hour service on Lines 3 and 4. Total revenues shown in Appendix "I" are the same as under present service. Total expenses, including operating taxes, have been reduced \$10,000, with income taxes re-calculated accordingly.

The \$10,000 estimated saving in expenses is a judgment figure, taking into account the possible savings in salary of one bus driver, running expenses of buses, and attendant taxes. A detailed estimate of the probable savings would require information as to precise rearrangement of bus driver's work runs, which is not available for the reasons set forth on page 4 of this study.

It is believed that the \$10,000 saving represents a conservative estimate, taking into account the numerous factors involved.

Appendix "I" shows an adjusted net income after income taxes of \$32,900, with an adjusted operating ratio of 94%, compared with an operating ratio of 95% under present service.



ROUTES 3 4
5 6 8

ROUTE MAP
BLUE & WHITE BUS
COMPANY OF WATTS,
INC.

Revised April 1971

Greenleaf Dr

Appendix B

SUMMARY OF BLUE & WHITE SERVICE

Line No.	One-Way Route Lengths	Assigned Buses	Mondays through Fridays		
			Peak Periods	Mid-day	Night
3	7.6 miles)	10	10-15 mins.	30 mins.	60 mins.
4	7.3)		15 mins.	30 mins.	60 mins.
5	6.8	4	20-30 mins.	30 mins.	60 mins.
6	4.45	1	60 mins. all day		
8	8.7	4	20-30 mins.	30 mins.	60 mins.
Special	-	2	Various special services carrying students to and from schools		
	<u>34.85</u>	<u>21</u>			
Buses owned and serviceable		20			
Leased buses		<u>2</u>			
		<u>22</u>			

Appendix C

LINE NO. 5 - HUNTINGTON PARK

Passenger Check to Determine PEAK LOAD Points - February 22, 1971

	<u>SOUTHBOUND</u>	<u>NORTHBOUND</u>
Time leaving Gage & Pacific	3.35 p.m.	
Time arriving Gage & Pacific		4.35 p.m.
Gage & Pacific - Pasgrs. on bus when it leaves	38	
Gage & Santa Fe - When it arrives		33
Pacific & Florence - Pasgrs. on bus when it leaves	54	
Florence & Santa Fe - When it arrives		33
Florence & Santa Fe - Pasgrs. on bus when it leaves	54	
Nadeau & Santa Fe - Pasgrs. on bus when it arrives	50	
When it leaves		34
Nadeau & Crocket - Pasgrs. on bus when it arrives	40	
When it leaves		34
Firestone & Fir - Pasgrs. on bus when it arrives	27	
When it leaves		35
97th & Anzac - Pasgrs. on bus when it arrives	24	
When it leaves		33
103rd & Grape - Pasgrs. on bus when it arrives	19	
When it leaves		31
103rd & Compton - Pasgrs. on bus when it arrives	17	
When it leaves		28
103rd & Central - Pasgrs. on bus when it arrives	13	
When it leaves		29
Imperial & Central - Pasgrs. on bus when it arrives	7	
When it leaves		12
Imperial & Avalon - Pasgrs. on bus when it arrives	5	
When it leaves		10

Bus No. 103 (36 seats) was used in both directions.

Appendix D

Blue & White Bus Company of Watts
 Check of Passengers on Board Buses at Peak Load Points

Line 3 - Compton via Avalon Boulevard - Southbound

Check Point: Manchester & Avalon Blvd., Los Angeles

<u>Wednesday, Feb. 24, 1971</u>			<u>Monday, March 15, 1971</u>		
<u>Time</u>	<u>No. Bus Seats</u>	<u>Psgrs. on Bus</u>	<u>Time</u>	<u>No. Bus Seats</u>	<u>Psgrs. on Bus</u>
3.30 pm	45	30	3.25 pm	45	33
3.40	41	13	3.47	45	36
3.48	45	14	4.08	45	40
3.54	35	1	4.18	36	13
4.11	37	40 (3)	4.32	45	41
4.18	41	17	4.47	45	39
4.33	35	14	5.05	45	36
4.48	45	25	5.20	45	38
5.05	45	19	5.35	36	27
5.21	45	33	5.50	45	26
5.34	41	14	5.54	45	13
5.48	<u>45</u>	<u>21</u>			
Totals	500	241		477	342
% Load Factor		48%			72%

Line 4 - Compton via Central Avenue - Southbound

Check Point: Manchester & Central Ave., Los Angeles

<u>Wednesday, Feb. 24, 1971</u>			<u>Monday, March 1, 1971</u>		
<u>Time</u>	<u>No. Bus Seats</u>	<u>Psgrs. on Bus</u>	<u>Time</u>	<u>No. Bus Seats</u>	<u>Psgrs. on Bus</u>
3.11 pm	45	27	3.15 pm	45	22
3.37	45	36	3.20	45	54 (9)
3.51	45	14	3.37	45	23
4.07	45	19	3.50	45	26
4.22	45	27	4.06	45	28
4.35	45	18	4.32	45	27
4.52	45	17	4.35	45	28
5.05	45	25	4.50	45	24
5.22	35	23	5.03	45	32
5.32	45	31	5.24	35	27
5.52	<u>45</u>	<u>13</u>	5.38	<u>45</u>	<u>32</u>
Totals	485	250		485	323
% Load Factor		52%			67%

Note: Checks were made between 3 and 6 pm each date.
 () = No. of standing passengers on bus at check point.
 Weather: Clear on Feb. 24, March 1 and 15.

Appendix E

Blue & White Bus Company of Watts
 Check of Passengers on Board Buses at Peak Load Points

Line 5 - Huntington Park - Southbound

Check Point: Santa Fe Ave. & Florence Ave., Huntington Park

<u>Wednesday, Feb. 24, 1971</u>			<u>Monday, March 1, 1971</u>		
<u>Time</u>	<u>No. Bus Seats</u>	<u>Psgrs. on Bus</u>	<u>Time</u>	<u>No. Bus Seats</u>	<u>Psgrs. on Bus</u>
3.15 pm	45	39	3.03 pm	45	30
3.35	36	35	3.22	45	39
3.55	37	16	3.40	36	47 (11)
4.15	45	21	4.13	45	39
4.33	36	14	4.25	45	32
4.55	37	24	4.35	36	27
5.13	45	10	5.23	45	57 (10)
5.35	36	16	5.25	45	29
Totals	317	175	5.32	36	16
				378	316
% Load Factor		55%			84%

Line 8 - Compton Avenue - Southbound

Check Point: 103rd Street & Compton Ave., Watts

<u>Wednesday, Feb. 24, 1971</u>			<u>Monday, March 1, 1971</u>		
<u>Time</u>	<u>No. Bus Seats</u>	<u>Psgrs. on Bus</u>	<u>Time</u>	<u>No. Bus Seats</u>	<u>Psgrs. on Bus</u>
3.21 p.m.	36	31	3.19 pm	36	36
3.45	45	17	3.53	37	37
4.10	37	15	4.06	37	9
4.30	35	32	4.27	35	24
4.50	36	31	4.49	36	23
5.22	45	26	5.06	37	13
5.30	37	8	5.29	37	19
6.00	36	9	5.47	35	24
Totals	307	169		290	185
% Load Factor		55%			64%

Note: Checks were made between 3 and 6 pm on each date.
 () = Number of standing passengers on bus at check point.
 Weather: Clear on both February 24 and March 1.

Blue & White Bus Company of Watts
 Estimated Revenues and Expenses on Full-Cost Basis for Four Weeks
 March 1-28, 1971

Item No.	Items (1)	Lines 3 & 4 (2)	Line 5 (3)	Line 6 (4)	Line 8 (5)	Special School Service (6)	Total - All Lines (7)
1	Fare Box Revenue (a)	\$17,927	\$ 6,351	\$ 854	\$4,399	-	\$29,531
	" " " (b)	3,550	2,785	-	2,366	\$1,708	10,409
2	School Tickets Honored (c)	598	66	8	343	-	1,015
	" " " (d)	-	-	-	-	840	840
3	Tokens Honored)						(220
4	Monthly Passes Honored)						(192
5	Diversion Payments from RTD)	1,270	540	50	400	-	(1,340
6	Advertising)						(508
7	Total Revenue	\$23,345	\$ 9,742	\$ 912	\$7,508	\$2,548	\$44,055
<u>EXPENSES</u>							
8	Full-cost expenses and operating taxes other than income taxes (but excluding Drivers' Wages) as developed by PUC Staff, at 33.8¢ per bus mile	\$10,209	\$ 3,504	\$ 819	\$4,889	\$ 926	\$20,347
9	Drivers' Wages at \$3.70 per hour (maximum contract rate effective March 1, 1971)	8,277	3,100	1,077	4,636	1,040	18,130
10	Additives for holidays, vacations, and sick leaves at 7% of Line 9	579	217	75	325	73	1,269
11	Total Expenses, excl. Income Tax (L.8+9+10)	\$19,065	\$ 6,821	\$1,971	\$9,850	\$2,039	\$39,746
12	Net Income (excl. Inc. Tax)	\$ 4,280	\$ 2,921	(\$1,059)	(\$2,342)	\$ 509	\$ 4,309

(a) = Actual cash collections in fare boxes on buses regularly assigned to lines as shown

(b) = Actual cash collections in fare boxes on buses which perform special school trips as well as extra service on various lines as shown. "Total-All Lines" of \$10,409 is a book record; allocations to

() = Loss various lines was made on basis of checks taken March 1-7, 1971.

(c) = School tickets honored, on regular line service, based on check for March 1-7, 1971.

(d) = School tickets honored, on special school services, based on check for March 1-7, 1971.

Blue & White Bus Company of Watts
 Operating Data and Statistics for Four
 Weeks, March 1-28, 1971

Item No.	Item (1)	Lines 3 & 4 (2)	Line 5 (3)	Line 6 (4)	Line 8 (5)	Special School Service (6)	Total - All Lines (7)
1	Bus Miles Operated, as Developed from Bus Drivers' Work Runs	30,204	10,368	2,424	14,464	2,740	60,200 #
2	Equivalent Straight Time Bus Drivers' Pay Time as Developed from Bus Drivers' Work Runs	2,237	838	291	1,253	281	4,900
3	Miles per Bus Drivers' Hour (Line 1 divided by Line 2)	13.5	12.4	8.3	11.5	9.8	12.3
4	Total Line Revenue Per Bus Mile (Line 7, App. "F", divided by Line 1, above)	77.3¢	94.0¢	37.6¢	51.9¢	93.0¢	73.2¢
5	Total Line Expenses & Operating Taxes (excl. Income Tax) Per' Bus Mile (Line 11, App. "F" divided by Line 1, above)	63.1¢	65.8¢	81.3¢	68.1¢	74.4¢	66.0¢

= Actual recorded bus miles March 1-7, 1971 = 15, 294 x 4 = 61,176

Blue & White Bus Company of Watts
 Estimated Annual Savings in Expenses Through Discontinuance
 of Line 6 - Manchester-Gorman

	For 12 Months Ending <u>March 31, 1972</u>
1 - Estimated Passenger Revenue and Other Revenue	\$12,000
2 - Bus Miles	31,270
3 - Operators' Pay Time	(a) 14.5 hrs. (b) 9.0 hrs.
4 - Operators' Pay Rate Per Hour	\$3.70
5 - Operators' Wages per day (savable) (Line 3(b) x Line 4)	\$33.30

6 - Operators' Wages Per Year (Line 5 x 258)	\$8,590
7 - Payroll Taxes, Workmen's Compensation Insurance, Vacation Allowance, Sick Allowance, Health Insurance	\$1,300
8 - Out-of-pocket Bus Running Expenses (other than Operators' Wages) at 6.3¢ per bus mile #	<u>\$1,970</u>
9-- Total savable Expenses (Sum of Lines 6, 7 and 8)	\$11,860
10 - Revenue less Expenses (Line 1 less Line 9)	<u>\$ 140</u>

(a) = Pro-rate of Work Runs 8, 16 and 17 assignable to Line 6.

(b) = Estimated possible saving in operator's time should Line 6 be discontinued.

= Out-of-pocket costs include:

Tires	0.96¢	per bus mile
Fuel	3.50	" " "
Repairs	1.70	" " " (parts only)
Oil	<u>0.14</u>	" " "
	6.30¢	x 31,270 miles = \$1,970

Appendix I

Blue & White Bus Company of Watts

Estimate of Results of Operations for 12 Months Ending
 March 31, 1972, Based on a Change of Peak-Hour Service
on Lines 3 and 4 from 15-Minute to 20-Minute Frequency

1 - Estimated Total Revenue *		<u>\$544,000</u>
2 - Estimated Total Expenses and Operating Taxes excluding Income Taxes*	<u>\$509,000</u>	
3 - Estimated Saving in Expenses and Operat- ing Taxes because of change of peak- hour service on Lines 3 and 4	<u>\$ 10,000</u>	
4 - Adjusted Total Expenses and Operating Taxes	<u>\$499,000</u>	<u>\$499,000</u>
5 - Adjusted Net Income before Income Taxes		<u>\$ 45,000</u>
6 - Adjusted Income Taxes		<u>\$ 12,100</u>
7 - Adjusted Net Income after Income Taxes		<u>\$ 32,900</u>
8 - Adjusted Operating Ratio % (L.4 + L.6/L.1)		94%
9 - Rate Base*		<u>\$ 53,000</u>
10 - Adjusted Rate of Return (L.7/L.9)		62%

* = As shown in Table attached to Results of Operation Report,
 dated April 23, 1971.

